

1042-513

Dart Aerospace Ltd.

Date: Monday, 20/04/2009 12:59:52 PM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : FLOAT SKIDTUBE ASSEMBLY
Job Number : 47288A	
Estimate Number : 12548	
P.O. Number :	Part Number : D206642545
This Issue : 20/04/2009 S.O. No. :	Drawing Number : D3274 REV D
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SKIDTUBES	Drawing Revision : D
Previous Run : 42294A	Material :
Written By :	Due Date : 10/05/2009 Qty: 1 Um: Each
Checked & Approved By : <u>JUD 09.04.20</u>	
Comment : Est Rev:A New Issue 06-10-06 JLM Est Rev:B Added SS Wearplates & Gaskets 07-02-23 JLM Est Rev:C ECN 1080p 07-12-06 DD verified by: Est Rev:D as per PAR 08-015 08-04-17 DD verified by:ec Est Rev:E 08-10-09 revise details DD verified by:EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	DC	DOCUMENT CONTROL
-----	----	------------------

**Comment:** DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D206-642-545 CHG002

N/A

2.0	D26001190	Extrusion Round 3" 206
-----	-----------	------------------------

**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D2600-1-190	3" OD Tube	31032

KT 09-04-21

3.0	D32851	Cap
-----	--------	-----

**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3285-1	Fwd Cap	333702

BE 09/04/22

4.0	SKIDTUBES 1	SKIDTUBESS RESOURCE 1
-----	-------------	-----------------------


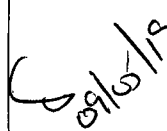
**Comment:** LANDING GEAR RESOURCE 1

2- Bend FWD end of tube using bend prog D3274 FWD dwg D3274, cut fwd end tube with saw table setup D3274

3- Remove fwd indexing ridge as per dwg D3274 and prepare for welding

KT 09-04-21

DTC

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
9-4-22	4	step ① should read Fabricate as Per DWGD3274-043 Perm Change		9-4-22 09/05/19			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 20/04/2009 12:59:52 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 47288A

Part Number: D206642545

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1- Weld Fwd Cap as per Dwg D3274 and QSI 004. Use aluminum rod.

A/R Aluminum Rod

m109213/m110972

BE 09/04/22

5- Grind welds flush to Fwd cap on top surface only.

BE 09/04/22

6- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

7- Drill Aft cap pilot hole using DT8025

8- Cleco DT8025 in position and install pilot hole drill Jig DT8891. Drill 3/16" pilot holes as per Dwg D3274

9- Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch#

10- Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

BE 09-04-22

5.0 HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid Etch and Alodine tube as per QSI 005 4.1

ET 09-04-22

6.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

① 11-9-4-22

7.0 D3282041

Float Web (206L/407)



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3282-041 Float Web

45304

ET 09-04-22

8.0 SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open Ø0.313" and 0.375" crossbolt spacer holes as per Dwg D3274

2-deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube

3-Bond web in place as per Dwg D3274 & QSI 015.

ET 09-04-22

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D206-642-545 PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: D Date: 09/05/20
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR: <u>47288A</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09.04.23	10	3.350" AFT BEND HIGH R.C. Process.	<u>CP</u> 09.04.23 per QSI 042	Acceptable	<u>ST</u> 09-04-23	<u>S</u> 09/04/23	<u>CP</u> 09.04.23 per QSI 042	<u>S</u> 09/04/23
09.04.27	13	FLANGE WIDTH ON SADDLE IS 0.480" WIDE AT AFT SADDLE. FROM EXCESSIVE GRINDING	<u>CP</u> 09.04.27 per QSI 042	Acceptable	<u>pm</u> 09-04-29	<u>S</u> 09/04/28	<u>CP</u> 09.04.27 per QSI 042	<u>S</u> 09/04/28
		R.C. Grinders got away from employee. Human error						

NOTE: Date & initial all entries

Date: Monday, 20/04/2009 12:59:53 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 47288A

Part Number: D206642545

Job Number:



Seq. #:

Machine Or Operation:

Description :

A/R Sikaflex-291 M 111 081
Sikaflex expire date: 10-01-01
Start: 09-04-22 Time: 11:00
Finish: 9/4/23 Time: 7:45am
(Adhere for 12 hours)

} RT 09-04-22

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/04/23

10.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

(Pto) →
Previous Page

1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.

RT 09-04-23

2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2
OPEN HOLES TO .297"

3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD END OF TUBE
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

M
9-4-24

4- Countersink crossbolt spacer holes as per Dwg D3274

5- prepare for welding

11.0

D2649

Cross Bolt Spacer



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Qty Part Number Description Batch
12 D2649 Crossbolt spacer

B 45317

BE 09/04/27

12.0

D32751

Crossbolt Spacer



Comment: Qty.: 37.0000 Each(s)/Unit Total : 37.0000 Each(s)

Pick:

Qty Part Number Description Batch
37 D3275-1 Crossbolt spacer

B 44572

BE 09/04/27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 20/04/2009 12:59:53 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 47288A

Part Number: D206642545

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod
A/R Aluminum Rod *m109213 BE 09/04/27*

2-Grind cross bolt welds flush as per Dwg D3274.

3-Counterbore 5/16" x 0.750" deep as per Dwg D3274. Use DT8743 visual aid Jig and deburr.

PF
Back of 2nd Page

> fm 09-04-27

14.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

S 02/04/29 *(10)*

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 02/04/29 *(10)*

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING *Pressure WASH*
Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

CMO FL 09/05/05 *(21)*

START TIME:

1:55

OVEN TEMPERATURE:

320°

FINISH TIME:

2:25

FL 09/05/05 *(1)*

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

09-05-06 *(X)*

18.0

D3415041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3415-041

Nut Plate

B33842

09-05-06 *(X)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 20/04/2009 12:59:53 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 47288A

Part Number: D206642545

Job Number:



Seq. #:

Machine Or Operation:

Description :

19.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 CCR264SS3-3 Rivet M111548

MU

20.0

CR3212403

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 CR3212-4-03 Rivet M115984

MU

21.0

ALS71032130

Insert



Comment: Qty.: 78.0000 Each(s)/Unit Total : 78.0000 Each(s)

Insert

Batch: M108606

MU

22.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

✓ 1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.
A/RN/ALPS-3 M109956

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a

✓ A/R Sikaflex-291 M111013

Sikaflex expire date: 10/20

MU 09-05-06 (X1)

23.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Inspect Nut Plate & Inserts

S08/05/06 (X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 20/04/2009 12:59:53 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 47288A

Part Number: D206642545

Job Number:



Seq. #:

Machine Or Operation:

Description :

24.0

AN3C4A

BOLT



Comment: Qty.: 80.0000 Each(s)/Unit Total : 80.0000 Each(s)

BOLT

Batch: M111572

lll

25.0

D353515

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B42219

lll

26.0

D353523

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B46618

lll

27.0

D353535

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B39233

lll

28.0

D353539

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B44645

lll

29.0

D353615

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B46883

lll

30.0

D353623

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B44646

lll

09-05-06

(X)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 20/04/2009 12:59:53 PM
User: Julie Dawsc 1

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 47288A

Part Number: D206642545

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

D353635

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: 1346885

JH

32.0

D353639

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: 1333966

JH

33.0

D35371

Wearpad



Comment: Qty.: 9.0000 Each(s)/Unit Total : 9.0000 Each(s)

WEARPAD

Batch: (8) 1346886 / (1) 1346650

JH

34.0

D35373

Wearpad



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARPAD

Batch: 1333881

JH

35.0

AN960C10L

washer



Comment: Qty.: 80.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick:

Qty Part Number

Description Batch

80 AN960C10L

Washer M111279

JH

36.0

D36721

Phenolic Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Washer

batch 1339275

JH

37.0

D34131

Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3413-1

Ring 1333949

JH

09-05-06

80

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 20/04/2009 12:59:53 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 47288A

Part Number: D206642545

Job Number:



Seq. #:

Machine Or Operation:

Description :

38.0

AN4C5A

BOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 AN4C5A

Bolt M104936

EU

39.0

AN960C416

washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 AN960C416

Washer M100993

EU

40.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2646

Aft Cap B46327

EU

41.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

✓ 2-Install wearpads & gaskets as per Dwg D3274.

3-Install ring as per Dwg D3274

✓ A/R Sikaflex-291 1111081

Sikaflex expire date: 10/20

✓ 4-Inspect for foreign objects as per QSI 024

5-Spray inside of tube on both sides of web with LPS-3

4 A/R LPS-3 Batch: _____

✓ 6-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R Sikaflex-291 1111081

Sikaflex expire date: 10/20

91 09-05-07 (XU)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 20/04/2009 12:59:53 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 47288A

Part Number: D206642545

Job Number:



Seq. #:

Machine Or Operation:

Description :

42.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

5 09/05/07 (X)

43.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Rev D

8 09/05/07

5 09/05/07 (X)

44.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/05/19

Job Completion



mf
09-05-15

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

RELEASED

07.02.12

DESIGN CP	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3274	REV. D SHEET 1 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY SCALE NTS	
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

Qty -041	Qty -043	Part Number	Description
X		D3274-041	SKIDTUBE ASSEMBLY
	X	D3274-043	SKIDTUBE ASSEMBLY
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

GENERAL NOTES:

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

SHOP COPY

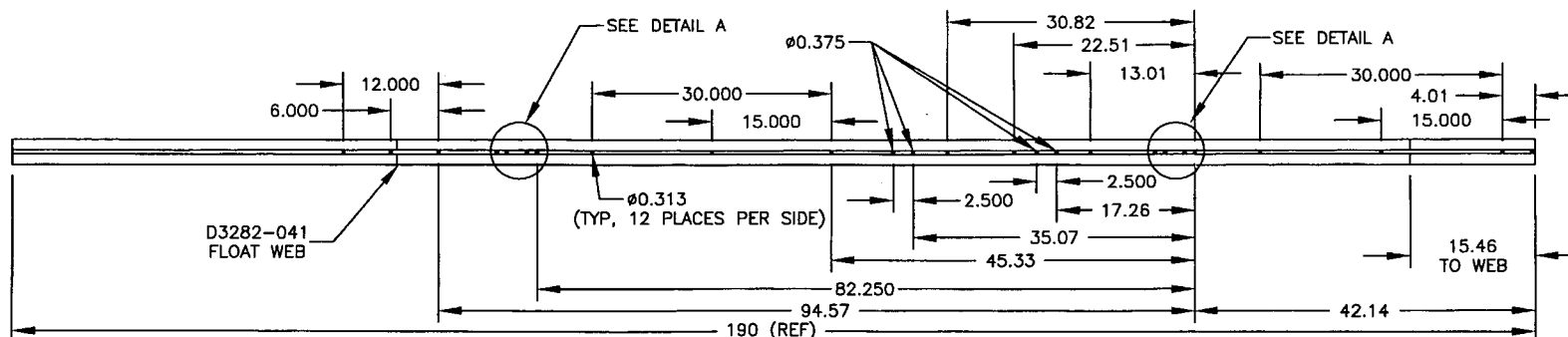
RETURN TO
ENGINEERINGUNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE

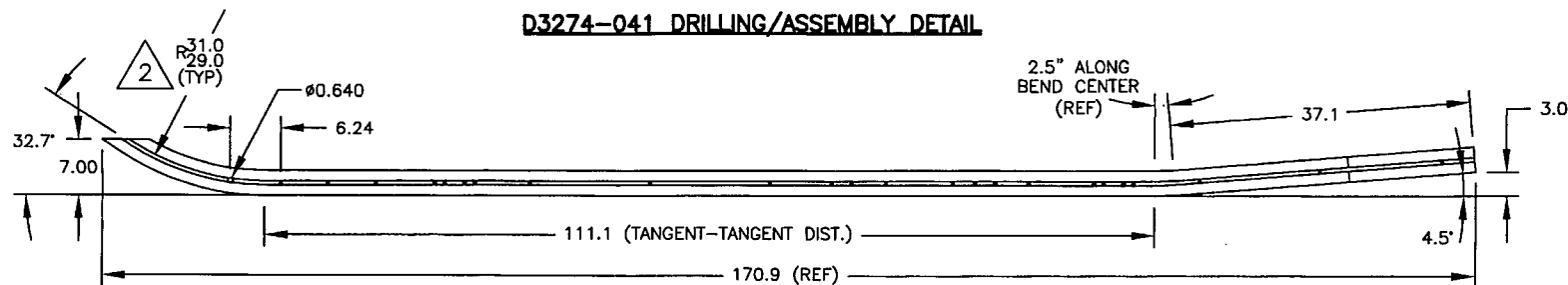
WORK ORDER

Copyright © 2004 by DART AEROSPACE USA, INC.

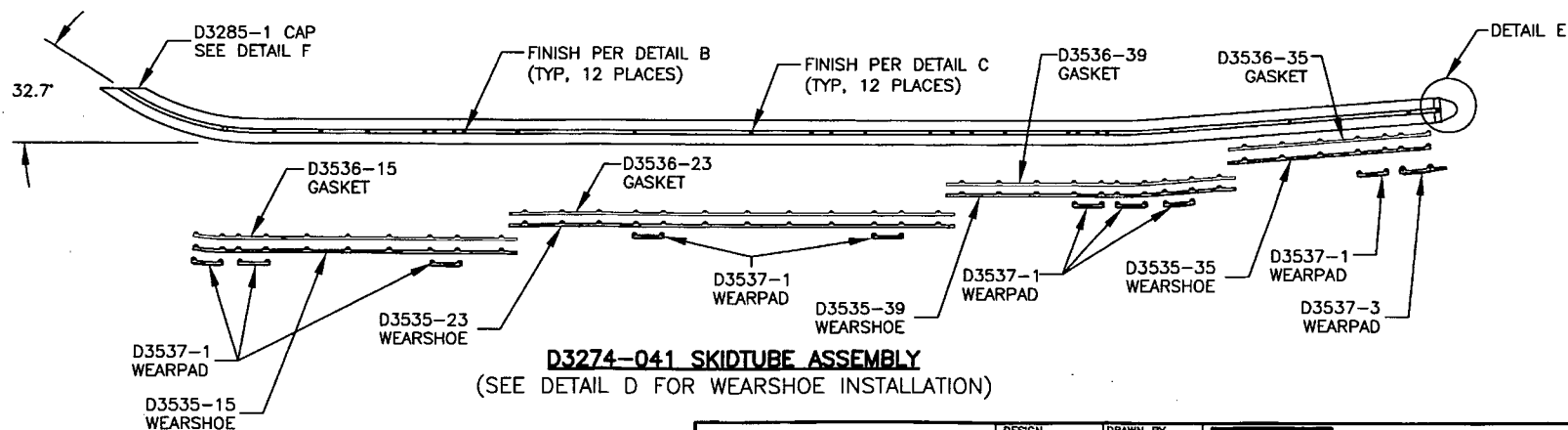
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



D3274-041 DRILLING/ASSEMBLY DETAIL



D3274-041 BEND/DRILLING DETAIL



D3274-041 SKIDTUBE ASSEMBLY

(SEE DETAIL D FOR WEARSHOE INSTALLATION)

NO. 478804
 WORK ORDER
 WITHOUT NOTICE
 SUBJECT TO AMENDMENT
 UNCONTROLLED COPY
 ENGINEERING
 RETURN TO
 SHOP COPY

RELEASED

07.01.12

COPYRIGHT © 2004 BY DART AEROSPACE USA, INC.


THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

DESIGN	CP	DRAWN BY	PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, WA
CHECKED	PH	APPROVED	PH	DRAWING NO. D3274
DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	REV. D SHEET 2 OF 4 SCALE 1:15

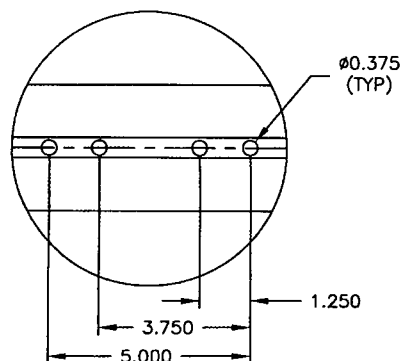


RELEASED

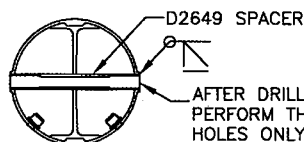
07.02.12 +

COPYRIGHT © 2004 BY DART AEROSPACE USA, INC.		DESIGN CP	DRAWN BY PH	 DART AEROSPACE USA, INC. PORT HADLOCK, MA	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		CHECKED #	APPROVED #	DRAWING NO. D3274	REV. D SHEET 3 OF 4
DATE 06.12.19		TITLE SKIOTUBE ASSEMBLY		SCALE 1:15	

DETAIL A: DRILL DETAIL

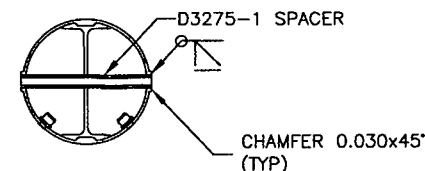


DETAIL B FOR 0.375 HOLES ONLY

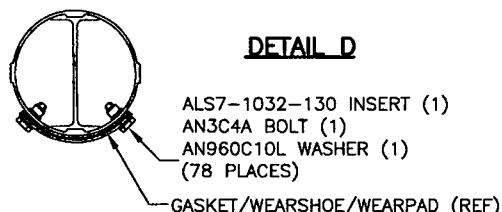


- AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR 0.375
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE TO 0.313x0.75 DEEP

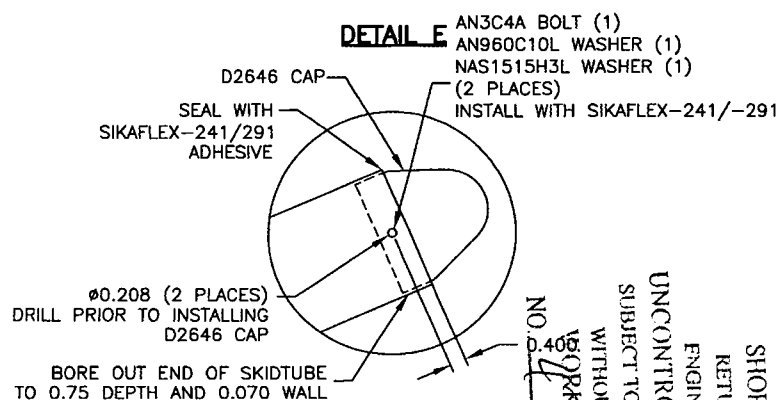
DETAIL C FOR 0.313 HOLES ONLY



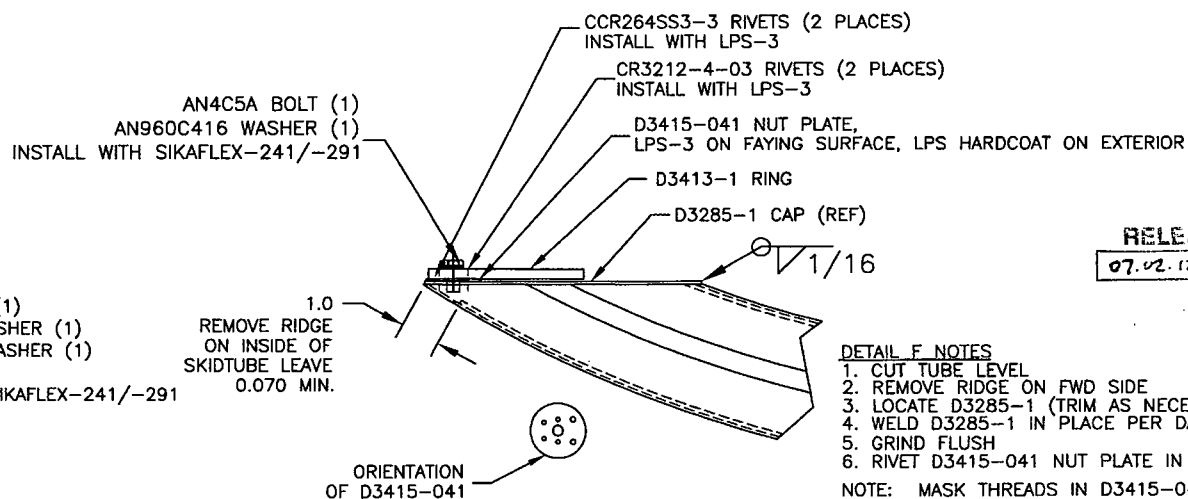
DETAIL D



DETAIL E



DETAIL F: END FINISHING DETAIL



DETAIL F NOTES

1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D3285-1 (TRIM AS NECESSARY)
 4. WELD D3285-1 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH

RELEASED
07.02.12

COPYRIGHT © 2004 BY DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL
AND IS SUPPLIED ON THE EXPRESS CONDITION
THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE USA, INC.

DESIGN CP	DRAWN BY PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, WA
CHECKED H	APPROVED H	DRAWING NO. D3274
DATE 06.12.19	TITLE SKIDTUBE ASSEMBLY	REV. D SHEET 4 OF 4 SCALE 1:3

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
NO. 408
WORK ORDER
47887

NO. 198

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 47288A
Part number: D206642545
Description: 206 skid tube
Welding Process: Tig ☒ Mig ☐
Base material: Aluminum
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual:
Penetration:

pass ☒ fail ☐
pass ☒ fail ☐

UNACCEPTABLE

Cracks:
Undercut:
Pin holes:
Overlap (cold lap)
Porosity (surface):
Coloration:

pass ☒ fail ☐
pass ☒ fail ☐
pass ☒ fail ☐
pass ☒ fail ☐
pass ☒ fail ☐
pass ☒ fail ☐

Qualifier P. D. [Signature] Date of Test Coupon 09.04.27

Welder Barclay Elliott Date of Test Coupon 09.04.27

The above named individual is qualified in accordance with AWS D17.1.2001 to weld